

I am retired from a thirty year career in public safety communications. For much of that time I worked as a field engineer for the Missouri State Highway Patrol which uses a statewide VHF-FM communications system operating in the 42 megaHertz band. There are several other states and other public safety entities which use allocations the same general part of the spectrum and to which these comments will also apply.

The noise environment has long been a substantial problem for those users, but the systems function acceptably well. In the financial climate of today replacement of these wide area systems does not seem to be possible in anything like the near term. Thus it is necessary to counter any new source of noise which would present serious negative impact to these vital communications assets, which are used every day, continuously.

The proposed system, Broadband over Power Lines, almost surely would present such serious noise interference as to render these vital police and fire communications systems unusable.

This statement is based on my personal experience in troubleshooting that exact problem. Noise of an intermittent nature caused many trips to repeater sites which were unproductive since the source of the interference would be gone when I arrived to conduct tests. On one occasion, after several of those unproductive visits, I finally determined the noise source to be a machine shop a half-mile from the repeater site where welding occurred on an occasional basis, generating broadband noise. This noise caused the repeater to have to be moved to another location.

Based on my experiences, and the fact that the district headquarters for these users are all located near metropolitan areas, though usually outside the city, I am convinced that these low band VHF radio systems simply cannot co-exist with the proposed Broadband over Power Lines computer access system.

When the district office where I was assigned first installed a computer system, noise interference was present until adequate shielding and bypassing was introduced. That office occasionally used High Frequency communications gear to communicate with other installations around the state, and the noise from the computer network initially caused significant interference, even though the computer system equipment utilized suppression methods internally. Work was still required to adequately suppress the computer generated noise on the network to a level compatible with the HF radio system.

I am also a licensed amateur radio operator, first licensed in early 1957 and continuously active since that time.

Based on many years of active participation, and associated detecting and solving radio noise problems, I am further convinced that all users of the HF part of the radio spectrum will be very severely affected by any widespread

adoption of the proposed system.

The filing of the American Radio Relay League is incorporated into my comments by reference. I, and a great many other amateur radio operators have seen this type of noise severely impact ham radio operations. With the events following the September 11, 2001 attack, these amateur radio operations have become much more significant as a alternate but vital communications asset to homeland security.

I haven't addressed all the maritime HF SITOR and aeronautical uses of HF but these users will be similiarly impacted.

I urge the Commission to reject the proposal in total. There are much better ways to accomplish the same objective without causing so much damage to the lower part of the radio spectrum.

Respectfully submitted,

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